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ABSTRACT

The study attempts to verify the affective competencies which vocational-technical areas in common require of students, and to validate those required in agriculture, business and office, distributive, home economics, and industrial education. The affective competencies were identified so that they might be a major part of the learning sequence, not merely incidental, and provide a basis on which to establish common experiences among vocational education programs. The competencies, elicited by review of vocational education publications, were verified by randomly selected employers, employees, and teachers. Their degree of commonality was validated by 48 State vocational directors, through the Delphi technique. The study concludes that: (1) State directors appear to agree that the five vocational areas do require common affective competencies; (2) teachers, employers, and employees appear to agree with directors on what constitutes affective competencies; (3) they appear also to agree on which are important for career success; (4) affective competencies appear to provide a commonality for the five areas; and (5) the common affective competencies appear to be as important as cognitive and psychomotor competencies. Tables comprise the largest part of the report. A research instrument, a condensed version of Bloom's taxonomy of educational objectives, and sample study correspondence are appended. (Author/AJ)

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Research Series No. 47

COMMON AFFECTIVE DOMAIN COMPETENCIES AMONG VOCATIONAL STUDENTS

BY

ANTHONY G. PORRECA AND JOHN J. STALLARD

1975

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Research Series No. 47

Final Report

COMMON AFFECTIVE DOMAIN COMPETENCIES OF STUDENTS AMONG VOCATIONAL AREAS

A Mini - Grant Research Project

Presented to

The Tennessee Research Coordinating Unit

by

Anthony G. Porreca

and

John J. Stallard

June 1975

FOREWORD

This project report is another effort by the Tennessee Research Coordinating Unit for Vocational Education to support and disseminate results of relevant research in vocational education.

The study was undertaken by individuals within the Department of Vocational-Technical Education at the University of Tennessee who felt that a listing of common affective domain competencies could be utilized to meet various learner needs in vocational programs and provide a basis to establish common experiences among vocational education programs.

It is hoped that the procedures and findings summarized in this report will be helpful to both researchers and practitioners in planning and decision-making for vocational education. The RCU welcomes any questions or comments pertaining to the mini-grant project report.

Garry R. Bice
RCU Director

TABLE OF CONTENTS

	Page
LIST OF TABLES	ii
ACKNOWLEDGMENTS	iii
ABSTRACT	iv
INTRODUCTION	1
Contribution to Vocational Education	2
Summary	3
STATEMENT OF THE PROBLEM	4
RATIONALE	4
OBJECTIVES	4
SCOPE AND LIMITATIONS OF THE STUDY	5
DEFINITION OF TERMS	5
METHODOLOGY	6
Verification of Competencies	7
Validation of Competencies	7
SAMPLE	7
FINDINGS	8
Verification of Competencies	8
Validation of Competencies	15
Strongly Recommend	28
Recommend	28
Recommend as a Secondary Goal	28
CONCLUSIONS	29
RECOMMENDATIONS	30
ANNOTATED BIBLIOGRAPHY	31
APPENDICES	35

LIST OF TABLES

TABLE I VERIFICATION OF COMPETENCY STATEMENTS 10

TABLE II STRONGLY RECOMMEND COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES 16

TABLE III RECOMMEND COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES 19

TABLE IV RECOMMEND AS A SECONDARY GOAL COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES 26

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The gracious cooperation and continued interest of the directors of vocational education who participated in this study are greatly appreciated. Their contribution to this research was essential. The input of the employees, employers, and vocational teachers who participated were also vital to the study. In addition, the cooperation received from the State of Tennessee and the Research Coordinating Unit at The University of Tennessee, Knoxville, under the direction of Dr. Garry Bice is also appreciated.

The continuous and tireless work, suggestions, and understanding of Alice Kolbe, business education student who provided the secretarial assistance for this study, are greatly appreciated.

Anthony G. Porreca

John J. Stallard

ABSTRACT

COMMON AFFECTIVE DOMAIN COMPETENCIES OF STUDENTS AMONG VOCATIONAL AREAS

by

Anthony G. Porreca

and

John J. Stallard

The problem of this study was to verify common affective domain competencies of students among vocational-technical areas and to validate (through the Delphi technique) common affective domain competencies of students among the vocational areas of agriculture, business and office, distributive, home economics, and industrial education.

The relevancy of today's complex and interrelated world of work is more meaningful to youth and adults, as well as teachers of vocational education, if competencies within the affective domain are a major part of the learning sequence and not merely incidental learning. The affective domain competencies identified in this study as common to vocational education will serve to limit the haphazard teaching of affective domain competencies and provide direction for further inquiry. Common affective domain competencies of students among vocational areas of agriculture, business and office, distributive, home economics, and industrial education provide a basis to establish common experiences among vocational education programs. Vocational programs in various localities could utilize the listing of common affective domain competencies to meet various learner needs.

The following procedures were completed to identify the common affective domain competencies of students among vocational areas: (1) reviewed and elicited common affective domain competencies from publications representing agriculture, business and office, distributive, home economics, and industrial education; (2) verified the elicited common affective domain competencies by submitting the identified competencies to groups of employees, employers, and agriculture, business and office, distributive, home economics, and industrial education teachers (The preceding procedures were executed to verify the elicited common affective domain competencies, therefore synthesizing the common affective domain competencies.); and (3) validated the affective domain competencies by state-level directors of vocational education to determine the degree of commonality.

Two separate samples were used in the study. Sample One was used to verify the synthesized common affective domain competencies and consisted of 191 persons randomly selected from the East Tennessee and Southwest Virginia areas. The sample included 40 employees in vocational-technical occupations, 51 employers of vocational-technical graduates, and 100 secondary and area vocational teachers representing the five vocational service areas. Sample Two was used to validate the common affective domain competencies among vocational students and was composed of 48 state-level directors of vocational education. Validation was completed through the Delphi technique using two probes.

The primary source for statistical procedures was the Statistical Package for the Social Sciences. The SPSS statistical package was used to determine: (1) the Probe One and Probe Two modal responses to each competency statement, and (2) the nonparametric rank-order correlation coefficients between each Probe One competency statement to each corresponding Probe Two competency statement, which also included a test of statistical significance.

CONCLUSIONS

The conclusions of this study are as follows:

1. State-level directors of vocational education appear to agree that there are common affective domain competencies of students which exist among vocational areas of agriculture, business and office, distributive, home economics, and industrial education.

2. The perceptions among employees, employers, and secondary and area school vocational teachers appear to be similar to the perceptions of state level directors of vocational education as to what constitutes affective domain competencies.

3. Employees, employers, and secondary and area school vocational agriculture, business and office, distributive, home economics, and industrial teachers appear to have similar perceptions concerning what are important affective domain competencies for employment career success. Of the 111 statements, 95 percent were considered important by at least 80 percent of the respondents.

4. Affective domain competencies appear to provide a commonality of learning which link agriculture, business and office, distributive education, home economics, and industrial education.

5. Common affective domain competencies of students among vocational areas appear to be as important as cognitive domain and psychomotor domain competencies in vocational-technical education.

RECOMMENDATIONS

Common affective domain competencies of students among vocational areas could be utilized to:

1. supplement and complement cognitive domain and psychomotor domain vocational competencies;

2. assist the development of students' values clarification in vocational education;

3. develop competency-based instruction in vocational education;

4. recognize the existence of common goals among the multi-dimensional vocational goals of agriculture, business and office, distributive, home economics, and industrial education;

5. strengthen the homogeneity mission of vocational education;

6. encourage vocational teacher education programs to assist vocational teachers in the development of learning environments which foster students' affective domain vocational competencies; and

7. assist youth and adults in career education, special (needs) education, disadvantaged groups' programs, and in-house business and industry programs toward sustained-gainful employment.

INTRODUCTION

Common affective domain competencies are concerned with the emotional development of the student and are related to students' interests, attitudes, values, and goals. Although vocational skill training is essential for initial job entry and for upward mobility, merely offering cognitive and psychomotor educational experiences to any learner may not be sufficient. The vocational and career-oriented students who lack essential knowledge of common affective domain competencies may experience a loss of enthusiasm, confidence, or optimism for their work.

Employable competencies, both cognitive and psychomotor perhaps provide the learner with initial job-entry competencies for employment. Affective domain competencies, concerned with learners' interests, attitudes, values, and goals are equally as important as other competencies for sustained employment success.

Common affective domain vocational competencies serve as the common thread to agriculture, business and office, distributive, home economics, and industrial education and demonstrate the across-the-board mission of these vocational areas. Perhaps through the identification and implementation of common affective domain competencies, vocational edu tion classroom teachers—middle through post-secondary levels—will recog

the common mission among vocational education areas. Common affective domain competencies in vocational-technical education demonstrate the commonality that exists among the vocational education areas.

Training for refinement of skills only may limit one's awareness of the world of work. The working individual, in an effort to achieve employment satisfaction, needs opportunities to develop interests, attitudes, values, and goals in understanding various roles related to a chosen vocation. Common affective domain vocational competencies would assist instruction for career education, disadvantaged groups' programs, and in-house business and industry training programs.

The purpose of this study was to verify and validate common affective domain competencies among vocational areas. There is a need for all vocational students to acquire specific preparation to gain employment. Perhaps some of these understandings, which are identified as common affective domain competencies among vocational areas, will serve as a foundation of employability in any occupational endeavor.

Contribution to Vocational Education

The vocational education coordination of agriculture, business and office, distributive, home economics, and industrial education has made a strong impact on our educational system, affecting the preparation of youth in pre-vocational middle schools, secondary schools, area vocational schools, junior high schools, and junior and senior colleges. The result of this coordination has also made a tremendous impact on teacher preparation for vocational education.

Implied in a comprehensive vocational program is an assumption that a common element exists in the preparation of youth and adults for a career. What are these common elements of learning or perhaps common affective domain competencies? Is there a basic, common relationship among all vocational areas that should be identified as common competencies?

Perhaps the identified common affective domain competencies will:

1. strengthen the efforts of agriculture, business and office, distributive, home economics, and industrial education in assisting youth and adults toward gainful employment,
2. assist each vocational area in reorganizing its individual contribution and relationship to broader goals for vocational competency through homogeneity, and
3. establish initially the commonalities which exist among vocational areas.

Perhaps this research will assist local school administrators, classroom teachers, state education consultants, and collegiate professors to understand and implement the meaning of a comprehensive program in vocational education. A relationship identified through common affective domain competencies does exist among several occupations and careers.

Summary

The relevancy of today's complex and interrelated world of work is more meaningful to youth and adults, as well as teachers of vocational education, if competencies within the affective domain are a major part of the learning sequence and not merely incidental learning. The affective domain competencies identified in this study as common to vocational education will serve to limit the haphazard teaching of affective domain competencies and provide direction for further inquiry.

The researchers believe that the affective domain competencies reported in this study can provide initial data for further research.

STATEMENT OF THE PROBLEM

The problem of this study was to verify and validate common affective domain competencies of students among vocational areas.

RATIONALE

Common affective domain competencies of students among vocational areas of agriculture, business and office, distributive, home economics, and industrial education provide a basis to establish common experiences among vocational education programs. Vocational programs in various localities could utilize the listing of common affective domain competencies to meet various learner needs.

OBJECTIVES

The two objectives of this study were:

1. to verify the common affective domain competencies of students among vocational-technical areas of agriculture, business and office, distributive, home economics, and industrial education, and
2. to validate (through the Delphi technique) the common affective domain competencies of students among vocational areas of agriculture, business and office, distributive, home economics, and industrial education.

SCOPE AND LIMITATIONS OF THE STUDY

The study encompassed the five vocational areas of (1) Agriculture, (2) Business and Office, (3) Distributive, (4) Home Economics, and (5) Industrial Education. Consumer and Health Education areas were not included as specific areas to verify and validate the common affective domain competencies.

The study, perhaps being the initial research to identify common affective domain competencies of students among vocational areas, is limited to the extent that the 111 common affective domain competencies among vocational areas provide a basic, initial listing of such competencies.

DEFINITION OF TERMS

Affective Domain--Objectives which emphasize a feeling, tone, an emotion, or a degree of acceptance or rejection. Affective objectives vary from simple attention to selected phenomena to complex but internally consistent qualities of character and conscience.[1] Values, attitudes, and interests are essential components of the affective domain.

Levels of Affective Domain—A reprint of a condensed version of the affective domain of the "Taxonomy of Educational Objectives," which is in The Classification of Educational Goals, Handbook II: Affective Domain,[2] is included in Appendix A. The inclusion of the shorter explanation of the

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[1]David R. Krathwohl, Benjamin S. Bloom, Bertram R. Masia, The Classification of Educational Goals, Handbook II: Affective Domain, New York: David McKay Company, 1964, p. 7.

[2]Ibid.

affective domain categories and sub-division does not imply that these descriptors are full explanations of the categories. Rather, the researchers included in this final report Appendix A of the original work by Krathwohl and others to serve the reader of this report. One is encouraged to refer to the original work by Krathwohl, Bloom, and Masia.

METHODOLOGY

The following procedures were completed to identify the common affective domain competencies of students among vocational areas:

1. Reviewed and elicited common affective domain competencies from publications representing agriculture, business and office, distributive, home economics, and industrial education.
2. Verified the elicited common affective domain competencies by submitting the identified competencies to groups of employees, employers, and agriculture, business and office, distributive, home economics, and industrial education teachers.

   The above procedures were executed to verify the elicited common affective domain competencies, therefore synthesizing the common affective domain competencies.
3. Validated the affective domain competencies by state-level directors of vocational education to determine the degree of commonality.

Validation was completed through the Delphi technique using two probes. Probe One was distributed to 56 directors of vocational education. Probe Two (Appendix B) was distributed to 49 directors of vocational education. Copies of the transmittal and follow-up letters are included

in Appendix B. The reported findings of this study are based on the responses of complete data received from 48 directors of vocational education.

Verification of Competencies

Total composite responses from employees, employers, agriculture teachers, business and office teachers, distributive education teachers, home economics teachers, and industrial education teachers were analyzed. Data relating to verification of the competency statements are included in the Findings, page 8.

Validation of Competencies

The primary source for statistical procedures was the Statistical Package for the Social Sciences.[3] The SPSS statistical package was used to determine: (1) the Probe One and Probe Two modal responses to each competency statement, and (2) the nonparametric rank-order correlation coefficients between each Probe One competency statement to each corresponding Probe Two competency statement, which also included a test of statistical significance.

SAMPLE

Two separate samples were used in this study. Sample One was used to verify the synthesized common affective domain competencies. The sample size included 191 persons who were randomly selected from the East Tennessee

[3]Norman H. Nie, et. al. Statistical Package for the Social Sciences, second edition, McGraw-Hill Book Company, New York, 1975.

and Southwest Virginia areas. The composition of Sample One was as follows:

40 Employees in Vocational-Technical Occupations,

51 Employers of Vocational-Technical Occupations, and

100 Secondary and Areas Vocational School Teachers composed of the following:

24 Agriculture Teachers
21 Business and Office Teachers
22 Distributive Education Teachers
16 Home Economics Teachers
17 Industrial Education Teachers

Sample Two was used to validate the common affective domain competencies among vocational students and was composed of 48 state-level directors of vocational education. The group of 48 directors was composed of the following participants:

44 State Directors of Vocational Education

1 State-Level Director from the District of Columbia,

1 State-Level Director from Guam,

1 State-Level Director from Trust Territory of the Pacific (Mariana Islands), and

1 State-Level Director from the Virgin Islands.

FINDINGS

The problem of this study was to verify and validate common affective domain competencies of students among vocational areas.

Verification of Competencies

The sample used to verify each statement of the researchers' constructed affective domain competencies was composed of employees, employers, secondary and area school vocational agriculture, business and office,

distributive, home economics, and industrial education teachers. Employees were asked whether each competency was or was not important in relation to their present work situation. Employers were asked whether each competency was or was not important for their workers to possess. Vocational teachers of the five service areas were asked whether or not each competency should be taught to their vocational students. The respective groups were asked to state their perceptions either as "yes" or "no." One-hundred ninety one individuals responded to the verification process. Table I reflects the composite data indicating a percentage of the total respondents who perceived each statement as "yes" thereby indicating its importance as a competency. Also, the tables indicate a percentage of the responses of each respective group for each competency. The following findings relate to this aspect of the study:

1. When the 40 employees were asked whether each competency was important in relation to their work situation, the following data were reported: 73 of the 111 statements received a rating of 90 percent or above; 33 statements received a rating of 80 - 89 percent; 3 statements received a rating of 70 - 79 percent; and 2 statements received a rating of 60 - 69 percent.

2. When the 51 employers were asked whether each competency was important for their workers to possess, the following data were reported: 61 of the 111 statements received a rating of 90 percent or above; 35 statements received a rating of 80 - 89 percent; 6 statements received a rating of 70 - 79 percent; 4 statements received a rating of 60 - 69 percent; 4 statements received a rating of 50 - 59 percent; and 1 statement received a rating of 40 - 49 percent.

TABLE I

VERIFICATION OF COMPETENCY STATEMENTS
PERCENT YES RESPONSES
n=191

Statements	Employees n=40	Employers n=51	Teachers AG n=24	BO n=21	DE n=22	HE n=16	IE n=17	Total Percent
1	88	88	100	95	100	75	94	91
2	80	57	100	91	100	100	94	89
3	85	90	100	100	100	100	100	96
4	88	76	96	91	95	75	83	86
5	90	84	96	81	95	88	88	89
6	80	92	100	71	78	88	77	84
7	78	55	96	57	100	82	59	75
8	63	53	96	77	95	94	71	78
9	75	66	100	66	91	82	59	77
10	85	82	92	100	86	94	88	90
11	95	100	96	100	100	88	100	97
12	85	75	92	91	78	57	88	81
13	98	98	100	100	91	94	100	97
14	98	100	100	100	91	88	100	97
15	93	94	100	100	100	100	94	97
16	90	86	96	86	91	94	88	90
17	93	88	100	100	95	94	100	96
18	93	75	92	81	95	69	77	83
19	93	98	100	100	91	94	94	96
20	98	100	100	100	95	94	100	98
21	98	100	100	95	86	69	94	92
22	90	98	100	95	86	69	88	89
23	83	84	96	91	86	69	77	84
24	93	100	100	95	95	82	100	95
25	93	100	100	86	82	75	100	91
26	90	100	100	95	86	88	94	93
27	98	98	100	95	91	82	94	94
28	90	100	100	95	91	75	94	92
29	80	75	88	77	86	69	71	78
30	95	88	100	91	86	88	94	92
31	93	97	100	91	91	88	100	94
32	88	94	100	91	91	82	94	91
33	83	92	92	86	82	82	83	86
34	95	96	96	95	95	82	100	94
35	98	98	100	95	95	75	94	94

TABLE I

VERIFICATION OF COMPETENCY STATEMENTS
PERCENT YES RESPONSES
(Continued)

Statements	Employees n=40	Employers n=51	Teachers AG n=24	BO n=21	DE n=22	HE n=16	IE n=17	Total Percent
36	80	82	100	95	86	69	77	84
37	90	84	96	95	95	63	71	85
38	88	65	96	91	86	63	77	81
39	95	90	100	91	95	75	94	91
40	83	84	100	66	91	63	88	82
41	78	90	92	71	86	69	94	83
42	88	69	100	100	95	100	83	91
43	85	66	96	100	95	100	88	90
44	90	97	100	100	95	100	100	97
45	95	98	100	100	100	94	100	98
46	98	100	100	100	100	94	100	99
47	93	94	100	100	100	94	94	96
48	98	100	100	100	91	94	100	98
49	90	96	100	100	91	94	100	96
50	88	86	96	95	82	75	83	86
51	85	92	100	95	82	88	100	92
52	90	86	96	81	95	88	88	89
53	95	98	100	95	95	94	100	97
54	80	71	96	71	86	88	83	82
55	68	53	96	66	86	69	71	73
56	85	88	96	91	95	94	77	89
57	90	82	100	95	95	94	94	93
58	95	94	96	81	82	88	83	88
59	93	90	96	91	91	94	83	91
60	95	100	100	100	95	88	100	97
61	93	98	100	95	95	75	100	94
62	85	96	100	81	86	100	100	93
63	90	82	100	81	100	75	88	88
64	88	86	100	86	95	75	88	88
65	95	94	96	91	95	82	88	92
66	85	71	96	62	95	82	71	80
67	98	94	100	100	100	100	94	98
68	90	84	100	95	95	100	88	93
69	88	84	88	95	100	88	83	89
70	95	92	100	100	95	100	94	97

TABLE I

VERIFICATION OF COMPETENCY STATEMENTS
PERCENT YES RESPONSES
(Continued)

Statements	Employees n=40	Employers n=51	Teachers AG n=24	BO n=21	DE n=22	HE n=16	IE n=17	Total Percent
71	90	84	100	77	86	94	77	87
72	95	100	100	100	100	88	100	98
73	90	88	100	95	95	75	94	91
74	90	92	100	95	100	82	94	93
75	85	82	92	81	95	82	83	86
76	70	49	100	66	86	50	65	69
77	100	100	100	100	100	94	94	98
78	100	91	100	95	95	94	94	96
79	95	94	96	100	91	88	88	93
80	85	88	100	100	95	94	94	94
81	93	88	100	95	95	94	100	95
82	88	86	100	100	91	88	94	92
83	95	91	96	95	100	100	94	96
84	98	88	100	100	95	94	94	96
85	93	81	100	95	100	82	94	92
86	93	97	92	100	95	88	94	94
87	95	91	100	91	91	94	94	94
88	80	84	100	77	91	88	71	84
89	100	94	100	95	100	88	94	96
90	93	82	96	91	91	75	88	88
91	83	91	100	86	91	88	100	91
92	88	81	100	86	91	88	94	90
93	83	83	100	66	69	88	83	82
94	85	100	100	91	95	94	100	95
95	93	84	96	86	82	69	94	86
96	95	94	100	91	91	94	100	95
97	93	84	96	95	100	94	88	93
98	93	88	96	86	91	88	94	91
99	100	97	100	95	95	69	100	94
100	88	78	92	66	82	94	83	83
101	100	92	100	95	100	88	100	96
102	98	93	100	81	95	94	94	94
103	93	94	100	95	100	94	94	96
104	93	97	100	95	95	88	88	94
105	100	91	100	95	95	88	88	94

TABLE I

VERIFICATION OF COMPETENCY STATEMENTS
PERCENT YES RESPONSES
(Continued)

Statements	Employees n=40	Employers n=51	Teachers AG n=24	BO n=21	DE n=22	HE n=16	IE n=17	Total Percent
106	98	97	100	95	95	88	100	96
107	98	98	100	95	100	94	100	98
108	100	100	100	95	100	94	94	98
109	95	98	100	95	95	94	94	96
110	93	87	100	100	100	88	94	95
111	95	88	100	100	91	82	94	93

3. When the 24 vocational agriculture teachers were asked whether each statement should be taught to their vocational students, the following data were reported: 110 of the 111 statements received a rating of 90 percent or above; and 1 statement received a rating of 80 - 89 percent.

4. When the 21 business and office teachers were asked whether each statement should be taught to their vocational students, the following data were reported: 80 of the 111 statements received a rating of 90 percent or above; 16 statements received a rating of 80 - 89 percent; 7 statements received a rating of 70 - 79 percent; 7 statements received a rating of 60 - 69 percent; and 1 statement received a rating of 50 - 59 percent.

5. When the 22 distributive education teachers were asked whether each statement should be taught to their vocational students, the following data were reported: 86 of the 111 statements received a rating of 90 percent or above; 22 statements received a rating of 80 - 89 percent; 2 statements received a rating of 70 - 79 percent; and 1 statement received a rating of 60 - 69 percent.

6. When the 16 home economics teachers were asked whether each statement should be taught to their vocational students, the following data were reported: 43 of the 111 statements received a rating of 90 percent or above; 42 statements received a rating of 80 - 89 percent; 12 statements received a rating of 70 - 79 percent; 12 statements received a rating of 60 - 69 percent; and 2 statements received a rating of 50 - 59 percent.

7. When the 17 industrial education teachers were asked whether each statement should be taught to their vocational students, the following data were reported: 67 of the 111 statements received a rating of 90 percent or above; 28 statements received a rating of 80 - 89 percent; 13 statements received a rating of 70 - 79 percent; 1 statement received a

rating of 60 - 69 percent; and 2 statements received a rating of 50 - 59 percent.

When the total percentages of the 191 sampled respondents were co piled, the following data were reported: 75 of the 111 statements receiv a rating of 90 percent or above; 30 statements received a rating of 80 - percent; 5 statements received a rating of 70 - 79 percent; and 1 statement received a rating of 60 - 69 percent.

Validation of Competencies

Tables II - IV include the common affective domain competencies among vocational areas as perceived by 48 state-level directors of vocational education. Each table represents one level of importance as perceived by state-level directors of vocational education. Respondents were provided six choice value levels: (1) strongly against; (2) do not recommend; (3) recommend as a minor goal; (4) recommend as a secondary goal; (5) recommend; and (6) strongly recommend.

The responses to Probe One were highly correlated with responses to Probe Two. The high correlation of competency statements on Probe One with competency statements on Probe Two resulted in statistically significant levels of correlation ($p < .001$) in almost all instances.

Tables II, III, and IV also report: (1) the competency statement number as listed on Probes One and Two (see Appendix B), (2) the affective domain classifications (see Appendix B), and (3) the nonparametric rank-order correlation coefficient and the statistical significance level betwe each Probe One competency statement to each corresponding Probe Two compet statement.

TABLE II

STRONGLY RECOMMEND COMMON AFFECTIVE DOMAIN COMPETENCIES
BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
1. Develops some awareness of evaluating interests and abilities with realistic occupational goals	3	1.1	.5474***
2. Accepts need for accuracy in business, industry, and education	11	1.2	.4119**
3. Generates work independently without constant supervision	14	1.3	.4922***
4. Practices care of occupational possessions (tools)	19	2.1	.5360***
5. Follows directions	20	2.1	.6051***
6. Displays promptness in work	21	2.1	.5800***
7. Practices safe work habits	24	2.2	.5314***
8. Practices a safety-minded and knowledgable approach to work at all times	25	2.2	.5377***
9. Practices good health habits	26	2.2	.5589***
10. Practices care for good personal appearance, character traits, and attitudes	27	2.2	.4152**
11. Possesses a sense of responsibility for providing service	39	2.2	.4584***

TABLE II
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
12. Assumes responsibility for the property and safety of the customer	41	2.2	.3251*
13. Gains personal satisfaction from gainful employment	44	2.3	.5624***
14. Displays personal desire to get along with others	46	2.3	.4783***
15. Derives personal satisfaction in accomplishment of quality of work	53	2.3	.4059**
16. Displays personal satisfaction in creating a favorable image with prospective customer	56	2.3	.5486***
17. Demonstrates an appreciation for quality of work	60	3.1	.5396***
18. Accepts the need to verify work in business--accuracy	61	3.1	.4027**
19. Prefers positive attitudes about work	67	3.2	.4961***
20. Accepts dignity of work	72	3.3	.6140***
21. Accepts and practices loyalty, honesty, and trustworthiness	77	3.3	.4318***

TABLE II
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
22. Maintains sound professional conduct	78	3.3	.5006***
23. Holds information confidential in his/her work	79	3.3	.5609***
24. Attempts to utilize effective decision-making processes	83	4.1	.4471***
25. Utilizes the ability to think through problems	84	4.1	.5853***
26. Displays realistic desire to work	89	4.2	.4246***
27. Develops resourcefulness in the work environment	104	5.2	.5552***
28. Understands the concept of work and the human satisfaction found in work	105	5.2	.4682***
29. Demonstrates perseverance in accomplishing a job	108	5.2	.4559***

*p < .05
**p < .01
***p < .001

TABLE III

RECOMMEND COMMON AFFECTIVE DOMAIN COMPETENCIES
BASED ON PROBE TWO MODES

	Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
1.	Awareness of the economics of the world of work	1	1.1	.4032**
2.	Gains a knowledge of the major occupational fields	2	1.1	.6505***
3.	Acquires an awareness of the role of industry and technology in a modern society	4	1.1	.6495***
4.	Awareness of the characteristics of production	6	1.1	.6769***
5.	Prefers a specific occupational aspiration and career development	12	1.3	.5534***
6.	Accepts need for inspecting and checking of work	13	1.3	.6593***
7.	Provides assistance to people	15	1.3	.6510***
8.	Listens with alertness to customer and co-workers' conversation	16	1.3	.5751***
9.	Appreciates good efficient manual dexterity	17	1.3	.5400***
10.	Perceives the interdependence of verbal and abstract reasoning	18	1.3	.5683***
11.	Accepts responsibility to set his occupational goals	22	2.2	.7022***

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
12. Practices a self-evaluation of interests for occupational opportunities	23	2.2	.6510***
13. Develops techniques to maintain cleanliness in work areas	28	2.2	.7269***
14. Assumes responsibility for developing an appreciation for and an understanding of processes and products in business and industry	29	2.2	.6790***
15. Develops the ability to plan and work in groups	30	2.2	.6006***
16. Volunteers extra work effort to complete rush jobs	31	2.2	.6057***
17. Voluntarily seeks information for his/her work	32	2.2	.6993***
18. Assumes responsibility for acquiring work supplies needed in the production of goods and services	33	2.2	.6925***
19. Cooperates in requesting, giving, receiving, or discussing information in the work environment	34	2.2	.4502***
20. Asks pertinent questions related to the product and/or service to be performed	35	2.2	.4878***
21. Assumes responsibility for giving out or sending out information when needed	37	2.2	.5765***

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
22. Contributes to the promotion of product or service	40	2.2	.4053**
23. Works congenially with other people	45	2.3	.5693***
24. Derives satisfaction when working with others as a cooperative member of group	47	2.3	.5194***
25. Enjoys cooperating with others in the work that needs to be performed	48	2.3	.6135***
26. Plans along with other employees work that needs to be completed	49	2.3	.6146***
27. Voluntarily assists other workers in developing occupational procedure	50	2.3	.4930***
28. Recognizes social and economic significance of work	57	3.1	.6218***
29. Accepts the place of management, supervision and decision making in the production of goods and services	58	3.1	.5418***
30. Assumes responsibility for listening to the planning of work	59	3.1	.3609**

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
31. Recognizes quality and/or good design in manufactured products and services	62	3.1	.5966***
32. Recognizes the importance of the profit incentive in business and industry	64	3.1	.5593***
33. Recognizes the importance of experses involved in business and industry	65	3.1	.5788***
34. Participates actively in organizing constructive work activities	68	3.2	.6466***
35. Assumes an active role in positive representation of business	69	3.2	.5639***
36. Attempts to learn about his role in the work environment	70	3.2	.5579***
37. Demonstrates devotion to a democratic work environment	73	3.3	.6574***
38. Believes in the free enterprise system	74	3.3	.5510***
39. Accepts the capitalistic system in the production of goods and services	75	3.3	.5972***
40. Pursues the development of a career	80	3.3	.6137***

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
41. Accepts specialized training for job-entry competency	81	3.3	.6588***
42. Appraises one's interests and aptitudes when pursuing a vocational occupation	82	3.3	.6720***
43. Forms judgments as to the rights and responsibilities of employees	85	4.1	.4932***
44. Forms judgments concerning one's work behavior in relation to other employees	86	4.1	.5524***
45. Attempts to identify an order or arrangement of work	87	4.1	.5299***
46. Develops a plan to utilize resources (money, labor, etc.) efficiently	88	4.2	.6297***
47. Accepts realistically the importance of background for a particular occupation	90	4.2	.5474***
48. Accepts his work as part of the work of others who precede and follow him in the production process	91	4.2	.5563***
49. Displays systematic planning to determine a course of action	92	5.1	.5231***
50. Applies scientific principles to work when needed	93	5.1	.4580***

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
51. Demonstrates willingness to experience work with a variety of new tools and materials	94	5.1	.2825*
52. Appraises quality of work with objectivity	96	5.1	.5048***
53. Judges situations to determine similarities and differences	97	5.1	.5480***
54. Makes recommendations for corrective measures based on feedback	98	5.1	.6947***
55. Makes corrections when work needs revision	99	5.1	.4036**
56. Demonstrates confidence in one's ability to succeed on the job	101	5.1	.4313***
57. Faces personal and social problems objectively	102	5.1	.6112***
58. Develops desirable attitudes about personal traits, and social significance of work	103	5.2	.5226***
59. Develops emotional stability and even temperament	106	5.2	.3796**
60. Develops the mental stability to work "under pressure" as some jobs may mean meeting a deadline	107	5.2	.2957*

TABLE III
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
61. Demonstrates self-direction in work responsibilities	109	5.2	.6275***
62. Refrains from human exploitation	111	5.2	.5610***

*p < .05
**p < .01
***p < .001

TABLE IV

RECOMMEND AS A SECONDARY GOAL COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
1. Acquires an awareness of the role of government regulations	5	1.1	.6031***
2. Becomes aware of different types of marketing in the economy	7	1.1	.6477***
3. Develops sensitivity to the importance of advertising	8	1.1	.7932***
4. Becomes aware of different types of operating budgets	9	1.1	.7217***
5. Develops awareness of the role of automation in business and industry	10	1.1	.4847***
6. Displays a willingness to gather information for reports and/or catalogs when appropriate	36	2.2	.4517***
7. Enjoys creating and developing information	38	2.2	.5307***
8. Enjoys participation in varied human relations	42	2.3	.6844***
9. Enjoys participating in group activities	43	2.3	.5958***
10. Takes pleasure explaining the requirements of a job to a new worker	51	2.3	.6052***
11. Takes pleasure in interchanging ideas for mutual professional benefit	52	2.3	.6631***

TABLE IV
(Continued)

COMMON AFFECTIVE DOMAIN COMPETENCIES BASED ON PROBE TWO MODES

Competencies	Probe Item Number	Affective Domain Classification	Item-Item Correlation Across Probes
12. Enjoys work that involves consumer demands and services	54	2.3	.5296***
13. Enjoys demonstrating and selling goods and services	55	2.3	.6427***
14. Understands the role of risks involved in business and industry	63	3.1	.4810***
15. Recognizes the importance of selecting product lines or services	66	3.1	.4180**
16. Provides leadership in the production of goods and services	71	3.2	.4130**
17. Understands the importance of starting a business	76	3.3	.5649***
18. Relies on maintenance to keep the commonly used products of industry in efficient, safe working order	95	5.1	.4857***
19. Judges his employment on the basis of happiness in one's work	100	5.1	.8475***
20. Aware of appropriate dress	110	5.2	.6235***

*p < .05
**p < .01
***p < .001

Strongly Recommend

Table II lists 29 competencies (or 26 percent of the 111 competencies) as strongly recommended common affective domain competencies of students among vocational areas. These competencies had a level six modal response on Probe Two.

Recommend

Table III lists 62 competencies (or 56 percent of the 111 competencies) as recommended common affective domain competencies of students among vocational areas. These competencies had a level five modal response on Probe Two.

Recommend as a Secondary Goal

Table IV lists 20 competencies (or 18 percent of the 111 competencies) as recommend as a secondary goal common affective domain competencies of students among vocational areas. These competencies had a level four modal response on Probe Two.

The data analyses reported no competencies with a modal response of level three, recommend as a minor goal, modal response of level two, do not recommend, or modal response of level one, strongly against on Probe One or Probe Two.

Probe One responses were correlated with Probe Two responses. The findings of this statistical analysis revealed that the Probe One responses were highly correlated with the Probe Two responses in almost all instances beyond the .001 confidence level. The high correlation of Probe One responses to the respective responses of Probe Two provides statistical evidence to suggest that a third probe would yield similar data.

CONCLUSIONS

The conclusions are as follows:

1. State level directors of vocational education appear to agree that there are common affective domain competencies of students which exist among vocational areas of agriculture, business and office, distributive, home economics, and industrial education.

2. The perceptions among employees, employers, and secondary and area school vocational teachers appear to be similar to the perceptions of state level directors of vocational education as to what constitutes affective domain competencies.

3. Employees, employers, and secondary and area school vocational agriculture, business and office, distributive, home economics, and industrial teachers appear to have similar perceptions concerning what are important affective domain competencies for employment career success. Of the 111 statements, 95 percent were considered important by at least 80 percent of the respondents.

4. Affective domain competencies appear to provide a commonality of learning which link agriculture, business and office, distributive education, home economics, and industrial education.

5. Common affective domain competencies of students among vocational areas appear to be as important as cognitive domain and psychomotor domain competencies in vocational-technical education.

RECOMMENDATIONS

Common affective domain competencies of students among vocational areas could be utilized to:

1. supplement and complement cognitive domain and psychomotive domain vocational competencies;

2. assist the development of students' values clarification in vocational education;

3. develop competency-based instruction in vocational education;

4. recognize the existence of common goals among the multi-dimensional vocational goals of agriculture, business and office, distributive, home economics, and industrial education;

5. strengthen the homogeneity mission of vocational education;

6. encourage vocational teacher education programs to assist vocational teachers in the development of learning environments which foster students' affective domain vocational competencies; and

7. assist youth and adults in career education, special (needs) education, disadvantaged groups' programs, and in-house business and industry programs toward sustained-gainful employment.

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Three examples of performance goals written in the affective domain and two rating scales used to help teachers use them.

Bloom, Benjamin S., Hastings, J. Thomas, Madaus, George F. Handbook on Formative and Summative Evaluation of Student Learning, New York: McGraw-Hill Book Company, 1971.

This is a book about the "state of the art" of evaluating student learning. PART 1 consists of four sections dealing with the evaluation problems all teachers are likely to encounter. The first section, Education and Evaluation (Chapters 1 to 3), presents a point of view about education and educational objectives and describes in detail the ways in which evaluation may be used to help bring students up to mastery levels of learning.

The second section, Using Evaluation for Instruction Decisions (Chapter 4 to 6), is intended to help teachers become aware of the different purposes of evaluation and the ways in which different types of evaluation instruments can be developed for use in the classroom.

The third section, Evaluation Techniques for Cognitive and Affective Objectives (Chapter 7 to 10), is organized around the Taxonomy of Educational Objectives (Bloom et al., 1956; Krathwohl et al., 1964); it presents models and techniques for constructing valid evaluation instruments for the different types of objectives found at all levels of education and to most subject fields.

The fourth section, Evaluation Systems (Chapter 11 and 12), suggests some of the ways in which cooperation by teachers and specialists can reduce the work involved in evaluation and improve the effectiveness of evaluation in the school situation.

PART 2 consists of chapters dealing with evaluation in each of the major subject fields and levels of education.

Borich, Gary D. "Accountability in Affective Domain" Journal of Research and Development in Education, Vol. 5, No. 1, Fall, 1971, pp. 87-96.

By measuring a network of variables related to cognitive outcomes, we may emphasize important behaviors that are adjuncts to learning and mitigate measurement problems of the performance contact.

Johnson, David W. "The Affective Side of the Schooling Experience" Elementary School Journal, Vol. 73, No. 6, March, 1973, pp. 306-313.

This article focuses on the importance of affective outcomes, the definition of the affective side of the schooling experience, and the measurement of the impact of instruction on the affective reactions of pupils.

Krathwohl, David R., Bloom, Benjamin S., Masia, Bertram B. Taxonomy of Educational Objectives--The Classification of Educational Goals--Handbook II: Affective Domain, New York: David McKay Company, Inc., 1964.

Part I describes the nature of the affective domain and the classification structure prepared for it. Part II gives the classification structure in detail and describes the evaluation of affective objectives at each level of the structure. In Part I, Chapters 1 and 2 give the background of the project and indicate how and why it came to be. Chapter 3 describes the basis of classification (internalization) and the nature of the classification structure, and relates internalization to terms common to the field. Chapter 4 analyzes the relation of the affective to the cognitive domain. Chapter 5 describes how the affective domain structure can be used to classify both objectives and test items, and it permits the reader to test himself on how well he can use the Taxonomy. Chapter 6 relates the affective domain to the contemporary views of curriculum, evaluation, and education research and suggests some points for further exploration.

Part II contains a complete and detailed description of the categories and subcategories of the affective domain and gives illustrative objectives and test items for each category.

Ridenour, Harlan E. "Cultivating the Affective Domain" American Vocational Journal, Vol. 44, No. 4, April, 1973, pp. 44, 82.

Reports on action initiated by the FFA to develop a program for agricultural students' personal development.

Schneider, Donald "The Time is Ripe for Affective Education" Clearing House, Vol. 47, No. 2, October, 1972, pp. 103-106.

Suggests exercises for developing emotional awareness in the classroom.

Stuelke, DuWayne H. "There's More To Learning Than The Accumulation of Knowledge" Man/Society/Technology, Vol. 33, No. 3, December, 1973, pp. 91-93.

The challenge facing industrial arts educators is to face a central role to the nonspecific transfer of principles, ideas, and attitudes.

Tuckman, Bruce W. "Getting At the Attitudes Problem" American Vocational Journal, Vol. 48, No. 1, January, 1973, pp. 47-48.

Charges that schools that provide career development programs are striking out in the wrong direction feeding information instead of appealing to students' emotions and feelings.

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APPENDIX A

A Condensed Version
of the Affective Domain of the
Taxonomy of Educational Objectives

1.0 RECEIVING (ATTENDING)

At this level we are concerned that the learner be sensitized to the existence of certain phenomena and stimuli; that is, that he be willing to receive or to attend to them. This is clearly the first and crucial step if the learner is to be properly oriented to learn what the teacher intends that he will. To indicate that this is the bottom rung of the ladder, however, is not at all to imply that the teacher is starting *de novo*. Because of previous experience (formal or informal), the student brings to each situation a point of view or set which may facilitate or hinder his recognition of the phenomena to which the teacher is trying to sensitize him.

The category of *Receiving* has been divided into three subcategories to indicate three different levels of attending to phenomena. While the division points between the subcategories are arbitrary, the subcategories do represent a continuum. From an extremely passive position or role on the part of the learner, where the sole responsibility for the evocation of the behavior rests with the teacher—that is, the responsibility rests with him for "capturing" the student's attention - the continuum extends to a point at which the learner directs his attention, at least at a semiconscious level, toward the preferred stimuli.

1.1 AWARENESS

Awareness is almost a cognitive behavior. But unlike *Knowledge*, the lowest level of the cognitive domain, we are not so much concerned with a memory of, or ability to recall, an item or fact as we are that, given appropriate opportunity, the learner will merely be conscious of something—that he take into account a situation, phenomenon, object, or stage of

affairs. Like *Knowledge* it does not imply an assessment of the qualities or nature of the stimulus, but unlike *Knowledge* it does not necessarily imply attention. There can be simple awareness without specific discrimination or recognition of the objective characteristics of the object, even though these characteristics must be deemed to have an effect. The individual may not be able to verbalize the aspects of the stimulus which cause the awareness.

Develops awareness of aesthetic factors in dress, furnishings, architecture, city design, good art, and the like.

Develops some consciousness of color, form, arrangement, and design in the objects and structures around him and in descriptive or symbolic representations of people, things, and situations.[1]

1.2 WILLINGNESS TO RECEIVE

In this category we have come a step up the ladder but are still dealing with what appears to be cognitive behavior. At a minimum level, we are here describing the behavior of being willing to tolerate a given stimulus, not to avoid it. Like *Awareness*, it involves a neutrality or suspended judgment toward the stimulus. At this level of the continuum the teacher is not concerned that the student seek it out, nor even, perhaps, that in an environment crowded with many other stimuli the learner will necessarily attend to the stimulus. Rather, at worst, given the opportunity to attend in a field with relatively few competing stimuli, the learner is not actively seeking to avoid it. At best, he is willing to take notice of the phenomenon and give it his attention.

Attends (carefully) when others speak—in direct conversation, on the telephone, in audiences.

Appreciation (tolerance) of cultural patterns exhibited by individuals from other groups—religious, social, political, economic, national, etc.

Increase in sensitivity to human need and pressing social problems.

1.3 CONTROLLED OR SELECTED ATTENTION

At a somewhat higher level we are concerned with a new phenomenon, the differentiation of a given stimulus into figure

[1] Illustrative objectives selected from the literature follow the description of each subcategory.

and ground at a conscious or perhaps semiconscious level—the differentiation of aspects of a stimulus which is perceived as clearly marked off from adjacent impressions. The perception is still without tension or assessment, and the student may not know the technical terms or symbols with which to describe it correctly or precisely to others. In some instances it may refer not so much to the selectivity of attention as to the control of attention, so that when certain stimuli are present they will be attended to. There is an element of the learner's controlling the attention here, so that the favored stimulus is selected and attended to despite competing and distracting stimuli.

Listens to music with some discrimination as to its mood and meaning and with some recognition of the contributions of various musical elements and instruments to the total effect.

Alertness toward human values and judgments on life as they are recorded in literature.

2.0 RESPONDING

At this level we are concerned with responses which go beyond merely attending to the phenomenon. The student is sufficiently motivated that he is not just 1.2 *Willing to attend,* but perhaps it is correct to say that he is actively attending. As a first stage in a "learning by doing" process the student is committing himself in some small measure to the phenomena involved. This is a very low level of commitment, and we would not say at this level that this was "a value of his" or that he had "such and such an attitude." These terms belong to the next higher level that we describe. But we could say that he is doing something with or about the phenomenon besides merely perceiving it, as would be true at the next level below this of 1.3 *Controlled or selected attention.*

This is the category that many teachers will find best describes their "interest" objectives. Most commonly we use the term to indicate the desire that a child become sufficiently involved in or committed to a subject, phenomenon, or activity that he will seek it out and gain satisfaction from working with it or engaging in it.

2.1 ACQUIESCENCE IN RESPONDING

We might use the word "obedience" or "compliance" to describe this behavior. As both of these terms indicate, there

is a passiveness so far as the initiation of the behavior is concerned, and the stimulus calling for this behavior is not subtle. Compliance is perhaps a better term than obedience, since there is more of the element of reaction to a suggestion and less of the implication of resistance or yielding unwillingly. The student makes the response, but he has not fully accepted the necessity for doing so.

Willingness to comply with health regulations.
Obeys the playground regulations.

2.2 WILLINGNESS TO RESPOND

The key to this level is in the term "willingness," with its implication of capacity for voluntary activity. There is the implication that the learner is sufficiently committed to exhibiting the behavior that he does so not just because of a fear of punishment, but "on his own" or voluntarily. It may help to note that the element of resistance or of yielding unwillingly, which is possibly present at the previous level, is here replaced with consent or proceeding from one's own choice.

Acquaints himself with significant current issues in international, political, social, and economic affairs through voluntary reading and discussion.
Acceptance of responsibility for his own health and for the protection of the health of others.

2.3 SATISFACTION IN RESPONSE

The additional element in the step beyond the *Willingness to respond* level, the consent, the assent to responding, or the voluntary response, is that the behavior is accompanied by a feeling of satisfaction, an emotional response, generally of pleasure, zest, or enjoyment. The location of this category in the hierarchy has given us a great deal of difficulty. Just where in the process of internalization the attachment of an emotional response, kick, or thrill to a behavior occurs has been hard to determine. For that matter there is some uncertainty as to whether the level of internalization at which it occurs may not depend on the particular behavior. We have even questioned whether it should be a category. If our structure is to be a hierarchy, then each category should include the behavior in the next level below it. The emotional component appears grad-

ually through the range of internalization categories. The attempt to specify a given position in the hierarchy as *the* one at which the emotional component is added is doomed to failure.

The category is arbitrarily placed at this point in the hierarchy where it seems to appear most frequently and where it is cited as or appears to be an important component of the objectives at this level on the continuum. The category's inclusion at this point serves the pragmatic purpose of reminding us of the presence of the emotional component and its value in the building of affective behaviors. But it should not be thought of as appearing and occurring at this one point in the continuum and thus destroying the hierarchy which we are attempting to build.

Enjoyment of self-expression in music and in arts and crafts as another means of personal enrichment.

Finds pleasure in reading for recreation.

Takes pleasure in conversing with many different kinds of people.

3.0 VALUING

This is the only category headed by a term which is in common use in the expression of objectives by teachers. Further, it is employed in its usual sense: that a thing, phenomenon, or behavior has worth. This abstract concept of worth is in part a result of the individual's own valuing or assessment, but it is much more a social product that has been slowly internalized or accepted and has come to be used by the student as his own criterion of worth.

Behavior categorized at this level is sufficiently consistent and stable to have taken on the characteristics of a belief or an attitude. The learner displays this behavior with sufficient consistency in appropriate situations that he comes to be perceived as holding a value. At this level, we are not concerned with the relationships among values but rather with the internalization of a set of specified, ideal, values. Viewed from another standpoint, the objectives classified here are the prime stuff from which the conscience of the individual is developed into active control of behavior.

This category will be found appropriate for many objectives that use the term "attitude" (as well as, of course, "value").

An important element of behavior characterized by *Valuing* is

that it is motivated, not by the desire to comply or obey, but by the individual's commitment to the underlying value guiding the behavior.

3.1 ACCEPTANCE OF A VALUE

At this level we are concerned with the ascribing of worth to a phenomenon, behavior, object, etc. The term "belief," which is defined as "the emotional acceptance of a proposition or doctrine upon what one implicitly considers adequate ground" (English and English, 1958, p. 64), describes quite well what may be thought of as the dominant characteristic here. Beliefs have varying degrees of certitude. At this lowest level of *Valuing* we are concerned with the lowest levels of certainty; that is, there is more of a readiness to re-evaluate one's position than at the higher levels. It is a position that is somewhat tentative.

One of the distinguishing characteristics of this behavior is consistency of response to the class of objects, phenomena, etc. with which the belief or attitude is identified. It is consistent enough so that the person is perceived by others as holding the belief or value. At the level we are describing here, he is both sufficiently consistent that others can identify the value, and sufficiently committed that he is willing to be so identified.

Continuing desire to develop the ability to speak and write effectively.
Grows in his sense of kinship with human beings of all nations.

3.2 PREFERENCE FOR A VALUE

The provision for this subdivision arose out of a feeling that there were objectives that expressed a level of internalization between the mere acceptance of a value and commitment or conviction in the usual connotation of deep involvement in an area. Behavior at this level implies not just the acceptance of a value to the point of being willing to be identified with it, but the individual is sufficiently committed to the value to pursue it, to seek it out, to want it.

Assumes responsibility for drawing reticent members of a group into conversation.
Deliberately examines a variety of viewpoints on controversial issues with a view to forming opinions about them.
Actively participates in arranging for the showing of contemporary artistic efforts.

3.3 COMMITMENT

Belief at this level involves a high degree of certainty. The ideas of "conviction" and "certainty beyond a shadow of a doubt" help to convey further the level of behavior intended. In some instances this may border on faith, in the sense of it being a firm emotional acceptance of a belief upon admittedly nonrational grounds. Loyalty to a position, group, or cause would also be classified here.

The person who displays behavior at this level is clearly perceived as holding the value. He acts to further the thing valued in some way, to extend the possibility of his developing it, to deepen his involvement with it and with the things representing it. He tries to convince others and seeks converts to his cause. There is a tension here which needs to be satisfied; action is the result of an aroused need or drive. There is a real motivation to act out the behavior.

Devotion to those ideas and ideals which are the foundations of democracy.
Faith in the power of reason and in methods of experiment and discussion.

4.0 ORGANIZATION

As the learner successively internalizes values, he encounters situations for which more than one value is relevant. Thus necessity arises for (*a*) the organization of the values into a system, (*b*) the determination of the interrelationships among them, and (*c*) the establishment of the dominant and pervasive ones. Such a system is built gradually, subject to change as new values are incorporated. This category is intended as the proper classification for objectives which describe the beginnings of the building of a value system. It is subdivided into two levels, since a prerequisite to interrelating is the conceptualization of the value in a form which permits organization. *Conceptualization* forms the first subdivision in the organization process, *Organization of a value system* the second.

While the order of the two subcategories seems appropriate enough with reference to one another, it is not so certain that 4.1 *Conceptualization of a value* is properly placed as the next level above 3.3 *Commitment*. Conceptualization undoubtedly begins at an earlier level for some objectives. Like 2.3 *Satisfaction in response*, it is doubtful that a single completely satisfactory loca-

tion for this category can be found. Positioning it before 4.2 *Organization of a value system* appropriately indicates a prerequisite of such a system. It also calls attention to a component of affective growth that occurs at least by this point on the continuum but may begin earlier.

4.1 CONCEPTUALIZATION OF A VALUE

In the previous category, 3.0 *Valuing*, we noted that consistency and stability are integral characteristics of the particular value or belief. At this level (4.1) the quality of abstraction or conceptualization is added. This permits the individual to see how the value relates to those that he already holds or to new ones that he is coming to hold.

Conceptualization will be abstract, and in this sense it will be symbolic. But the symbols need not be verbal symbols. Whether conceptualization first appears at this point on the affective continuum is a moot point, as noted above.

Attempts to identify the characteristics of an art object which he admires.

Forms judgments as to the responsibility of society for conserving human and material resources.

4.2 ORGANIZATION OF A VALUE SYSTEM

Objectives properly classified here are those which require the learner to bring together a complex of values, possibly disparate values, and to bring these into an ordered relationship with one another. Ideally, the ordered relationship will be one which is harmonious and internally consistent. This is, of course, the goal of such objectives, which seek to have the student formulate a philosophy of life. In actuality, the integration may be something less than entirely harmonious. More likely the relationship is better described as a kind of dynamic equilibrium which is, in part, dependent upon those portions of the environment which are salient at any point in time. In many instances the organization of values may result in their synthesis into a new value or value complex of a higher order.

Weighs alternative social policies and practices against the standards of the public welfare rather than the advantage of specialized and narrow interest groups.

Develops a plan for regulating his rest in accordance with the demands of his activities.

5.0 CHARACTERIZATION BY A VALUE OR VALUE COMPLEX

At this level of internalization the values already have a place in the individual's value hierarchy, are organized into some kind of internally consistent system, have controlled the behavior of the individual for a sufficient time that he has adapted to behaving this way; and an evocation of the behavior no longer arouses emotion or affect except when the individual is threatened or challenged.

The individual acts consistently in accordance with the values he has internalized at this level, and our concern is to indicate two things: (*a*) the generalization of this control to so much of the individual's behavior that he is described and characterized as a person by these pervasive controlling tendencies, and (*b*) the integration of these beliefs, ideas, and attitudes into a total philosophy or world view. These two aspects constitute the subcategories.

5.1 GENERALIZED SET

The generalized set is that which gives an internal consistency to the system of attitudes and values at any particular moment. It is selective responding at a very high level. It is sometimes spoken of as a determining tendency, an orientation toward phenomena, or a predisposition to act in a certain way. The generalized set is a response to highly generalized phenomena. It is a persistent and consistent response to a family of related situations or objects. It may often be an unconscious set which guides action without conscious forethought. The generalized set may be thought of as closely related to the idea of an attitude cluster, where the commonality is based on behavioral characteristics rather than the subject or object of the attitude. A generalized set is a basic orientation which enables the individual to reduce and order the complex world about him and to act consistently and effectively in it.

Readiness to revise judgments and to change behavior in the light of evidence.

Judges problems and issues in terms of situations, issues, purposes, and consequences involved rather than in terms of fixed, dogmatic precepts or emotionally wishful thinking.

5.2 CHARACTERIZATION

This, the peak of the internalization process, includes those objectives which are broadest with respect both to the phenomena covered and to the range of behavior which they comprise. Thus, here are found those objectives which concern one's view of the universe, one's philosophy of life, one's *Weltanschauung*—a value system having as its object the whole of what is known or knowable.

Objectives categorized here are more than generalized sets in the sense that they involve a greater inclusiveness and, within the group of attitudes, behaviors, beliefs, or ideas, an emphasis on internal consistency. Though this internal consistency may not always be exhibited behaviorally by the students toward whom the objective is directed, since we are categorizing teachers' objectives, this consistency feature will always be a component of *Characterization* objectives.

As the title of the category implies, these objectives are so encompassing that they tend to characterize the individual almost completely.

Develops for regulation of one's personal and civic life a code of behavior based on ethical principles consistent with democratic ideals.

Develops a consistent philosophy of life.

APPENDIX B

Sample Transmittal and Follow-Up Letters

Probe Two Statements

The University of Tennessee
COLLEGE OF EDUCATION
Knoxville 37916

Department of Vocational-Technical Education
Agricultural, Business, Distributive,
Home Economics and Industrial Education

SAMPLE COPY

November 21, 1974

Dear

One means of achieving excellence in training is through constant research. We are researching "Common Affective Domain Competencies Among Vocational Students." The affective domain concerns emotional development and is related to interests, attitudes, values and goals.

Your assistance is necessary to validate "Common Affective Domain Competencies Among Vocational Students" through the use of the Delphi Technique. These competencies will be validated by State Directors of Vocational-Technical Education throughout the nation, for we believe that State Directors would possess the necessary view of across-the-board common competencies among vocational students.

Perhaps you are aware that the Delphi Technique necessitates your responses to a series of probes. Your response to the enclosed Probe One will be summarized with the responses from the other 49 State Directors of Vocational-Technical Education. Probe Two will be sent to you soon after all of Probe One is returned. Probe Two will list your original response to Probe One, the summarized responses to Probe One, and a place for you to indicate a second response.

This research is funded through the Tennessee Research Coordinating Unit. A copy of the completed study will be available through ERIC as well as through the Tennessee Research Coordinating Unit.

Your coöperation, along with the cooperation of all State Directors of Vocational-Technical Education, is essential and valued. Please return the enclosed Probe One in the stamped, return-addressed envelope prior to December 15, 1974.

Sincerely,

Anthony G. Porreca
Associate Professor

John J. Stallard
Assistant Professor

Enclosure

The University of Tennessee
COLLEGE OF EDUCATION
Knoxville 37916

Department of Vocational-Technical Education
Agricultural, Business, Distributive,
Home Economics and Industrial Education

SAMPLE COPY

December 19, 1974

Dear State Director:

Last month we wrote to you regarding a research study entitled "Common Affective Domain Competencies" which is being conducted at The University of Tennessee by John J. Stallard and Anthony G. Porreca. A questionnaire was sent to you along with a letter explaining the purpose of the study. All state directors of vocational education are participating in the research.

The Delphi technique is being used as the major research procedure. This procedure necessitates that all questionnaires must be included in order for the findings to be valid. Your input into the study as a representative of your state is vital.

A copy of the questionnaire is included. Won't you take a few minutes to complete the instrument and return it to us in the enclosed self-addressed envelope. Your contribution to the study will be greatly appreciated.

Sincerely yours,

John J. Stallard
Assistant Professor

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Enclosure

MODAL RESPONSE TO PROBE #1

Please return in the enclosed envelope to: Porreca/Stallard
Room 110, Henson Hall
Department of Vocational-Technical Education
The University of Tennessee
Knoxville, TN 37916

COMMON AFFECTIVE DOMAIN COMPETENCIES OF STUDENTS AMONG VOCATIONAL AREAS

Utilizing the Delphi Technique

Please respond to each competency by circling the level of importance you feel each statement should have as a common affective domain competency for vocational-technical students. Please remember that if you do not change your Probe #2 response to the group's mode, please state your reason for no change under the statement.

Choice Value: 6 Strongly Recommend
5 Recommend
4 Recommend as a secondary goal
3 Recommend as a minor goal
2 Do not recommend
1 Strongly against

COMPETENCY STATEMENTS

Statement	Importance
1.0 RECEIVING (ATTENDING)	
1.1 Awareness	
1. Awareness of the economics of the world of work 6	5 4 3 2 1
Probe #1 Response	21
2. Gains a knowledge of the major occupational fields 6	5 4 3 2 1
	19

3. Develops some awareness of evaluating interests and abilities with realistic occupational goals 6	5	4	3	2	1
Probe #1 Response 25					
4. Acquires an awareness of the role of industry and technology in a modern society 6	5 (17)	4	3	2	1
5. Acquires an awareness of the role of government regulations. 6	5	4 (21)	3	2	1
6. Awareness of the characteristics of production 6	5 (20)	4	3	2	1
7. Becomes aware of different types of marketing in the economy 6	5	4 (18)	3	2	1
8. Develops sensitivity to the importance of advertising. 6	5	4 (20)	3	2	1
9. Becomes aware of different types of operating budgets. 6	5	4 (21)	3	2	1
10. Develops awareness of the role of automation in business and industry. . . 6	5	4 (24)	3	2	1
1.2 Willingness to Receive					
11. Accepts need for accuracy in business, industry, and education 6 (26)	5	4	3	2	1
1.3 Controlled or Selected Attention					
12. Prefers a specific occupational aspiration and career development 6	5 (18)	4	3	2	1

13. Accepts need for inspecting and checking of work 6 5 4 3 2 1
Probe #1 Response 5/20

14. Generates work independently without constant supervision 6/24 5 4 3 2 1

15. Provides assistance to people. 6 5/18 4 3 2 1

16. Listens with alertness to customer and co-workers' conversation. 6 5/17 4 3 2 1

17. Appreciates good efficient manual dexterity. 6 5/21 4 3 2 1

18. Perceives the interdependence of verbal and abstract reasoning 6 5/17 4 3 2 1

2.0 RESPONDING

2.1 Acquiescence in Responding

19. Practices care of occupational possessions (tools) 6/28 5 4 3 2 1

20. Follows directions 6/37 5 4 3 2 1

21. Displays promptness in work. 6/36 5 4 3 2 1

2.2 Willingness to Respond

22.	Accepts responsibility to set his occupational goals . . . . . Probe #1 Response	6	5 23	4	3	2	1
23.	Practices a self-evaluation of interests for occupational opportunities. .	6	5 27	4	3	2	1
24.	Practices safe work habits	6 35	5	4	3	2	1
25.	Practices a safety-minded and knowledgeable approach to work at all times.	6 32	5	4	3	2	1
26.	Practices good health habits	6 24	5	4	3	2	1
27.	Practices care for good personal appearance, character traits, and attitudes.	6 25	5	4	3	2	1
28.	Develops techniques to maintain cleanliness in work areas.	6	5 22	4	3	2	1
29.	Assumes responsiblity for developing an appreciation for and an understanding of processes and products in business and industry	6	5 18	4	3	2	1
30.	Develops the ability to plan and work in groups.	6	5 22	4	3	2	1
31.	Volunteers extra work effort to complete rush jobs	6	5 22	4	3	2	1

32.	Voluntarily seeks information for his/her work . . . . . Probe #1 Response	6	5 19	4	3	2	1
33.	Assumes responsibility for acquiring work supplies needed in the production of goods and services	6	5 29	4	3	2	1
34.	Cooperates in requesting, giving, receiving, or discussing information in the work environment.	6	5 26	4	3	2	1
35.	Asks pertinent questions related to the product and/or service to be performed.	6	5 23	4	3	2	1
36.	Displays a willingness to gather information for reports and/or catalogs when appropriate.	6	5	4 20	3	2	1
37.	Assumes responsibility for giving out or sending out information when needed.	6	5 21	4	3	2	1
38.	Enjoys creating and developing information	6	5	4 22	3	2	1
39.	Possesses a sense of responsibility for providing service.	6 23	5	4	3	2	1
40.	Contributes to the promotion of product or service	6	5 20	4	3	2	1
41.	Assumes responsibility for the property and safety of the customer	6 24	5	4	3	2	1

2.3 Satisfaction in Response

42.	Enjoys participation in varied human relations . . . . . Probe #1 Response	6	5	4/22	3	2	1
43.	Enjoys participating in group activities	6	5	4/24	3	2	1
44.	Gains personal satisfaction from gainful employment.	6/22	5	4	3	2	1
45.	Works congenially with other people.	6	5/24	4	3	2	1
46.	Displays personal desire to get along with others.	6/24	5	4	3	2	1
47.	Derives satisfaction when working with others as a cooperative member of group.	6	5/17	4	3	2	1
48.	Enjoys cooperating with others in the work that needs to be performed. . .	6	5/22	4	3	2	1
49.	Plans along with other employees work that needs to be completed	6	5/29	4	3	2	1
50.	Voluntarily assists other workers in developing occupational procedure . .	6	5/19	4	3	2	1
51.	Takes pleasure explaining the requirements of a job to a new worker. . . .	6	5	4/17	3	2	1
52.	Takes pleasure in interchanging ideas for mutual professional benefit. . .	6	5	4/16	3	2	1

53. Derives personal satisfaction in accomplishment of quality of work 6 5 4 3 2 1
Probe #1 Response 30

54. Enjoys work that involves consumer demands and services. 6 5 4 3 2 1
23

55. Enjoys demonstrating and selling goods and services. 6 5 4 3 2 1
16

56. Displays personal satisfaction in creating a favorable image with prospective customer 6 5 4 3 2 1
18

3.0 VALUING

3.1 Acceptance of a Value

57. Recognizes social and economic significance of work. 6 5 4 3 2 1
21

58. Accepts the place of management, supervision and decision making in the production of goods and services 6 5 4 3 2 1
20

59. Assumes responsibility for listening to the planning of work 6 5 4 3 2 1
26

60. Demonstrates an appreciation for quality of work 6 5 4 3 2 1
34

61. Accepts the need to verify work in business--accuracy. 6 5 4 3 2 1
25

62. Recognizes quality and/or good design in manufactured products and services 6 5 4 3 2 1
16

63. Understands the role of risks involved in business and industry. 6	5	4	3	2	1
Probe #1 Response		19			
64. Recognizes the importance of the profit incentive in business and industry 6	5	4	3	2	1
	17				
65. Recognizes the importance of expenses involved in business and industry 6	5	4	3	2	1
	18				
66. Recognizes the importance of selecting product lines or services 6	5	4	3	2	1
		18			

3.2 Preference for a Value

67. Prefers positive attitudes about work.	6	5	4	3	2	1
	30					
68. Participates actively in organizing constructive work activities 6	5	4	3	2	1
	24				
69. Assumes an active role in positive representation of business. 6	5	4	3	2	1
	20				
70. Attempts to learn about his role in the work environment 6	5	4	3	2	1
	19				
71. Provides leadership in the production of goods and services. 6	5	4	3	2	1
		20			

3.3 Commitment

72.	Accepts dignity of work. . . . . Probe #1 Response 30	6	5	4	3	2	1
73.	Demonstrates devotion to a democratic work environment	6	5/17	4	3	2	1
74.	Believes in the free enterprise system	6	5/19	4	3	2	1
75.	Accepts the capitalistic system in the production of goods and services. .	6	5/20	4	3	2	1
76.	Understands the importance of starting a business.	6	5	4/24	3	2	1
77.	Accepts and practices loyalty, honesty, and trustworthiness.	6/34	5	4	3	2	1
78.	Maintains sound professional conduct	6/25	5	4	3	2	1
79.	Holds information confidential in his work	6/24	5	4	3	2	1
80.	Pursues the development of a career.	6	5/24	4	3	2	1
81.	Accepts specialized training for job-entry competency.	6	5/26	4	3	2	1
82.	Appraises one's interests and aptitudes when pursuing a vocational occupation	6	5/28	4	3	2	1

4.0 ORGANIZATION

4.1 Conceptualization of a Value

83.	Attempts to utilize effective decision-making processes.	6	5	4	3	2	1
	Probe #1 Response	26					
84.	Utilizes the ability to think through problems	6	5	4	3	2	1
		27					
85.	Forms judgements as to the rights and responsibilities of employees. . . .	6	5	4	3	2	1
			21				
86.	Forms judgements concerning one's work behavior in relation to other employees.	6	5	4	3	2	1
			23				
87.	Attempts to identify an order or arrangement of work	6	5	4	3	2	1
			18				

4.2 Organization of a Value System

88.	Develops a plan to utilize resources (money, labor, etc.) efficiently. . .	6	5	4	3	2	1
			21				
89.	Displays realistic desire to work.	6	5	4	3	2	1
		25					
90.	Accepts realistically the importance of background for a particular occupation	6	5	4	3	2	1
			18				
91.	Accepts his work as part of the work of others who precede and follow him in the production process.	6	5	4	3	2	1
			19				

5.0 CHARACTERIZATION BY A VALUE OR VALUE COMPLEX

5.1 Generalized Set

92.	Displays systematic planning to determine a course of action . . . . . 6 Probe #1 Response	5 21	4	3	2	1
93.	Applies scientific principles to work when needed. 6	5 21	4	3	2	1
94.	Demonstrates willingness to experience work with a variety of new tools and materials. 6	5 22	4	3	2	1
95.	Relies on maintenance to keep the commonly used products of industry in efficient, safe working order. 6	5	4 18	3	2	1
96.	Appraises quality of work with objectivity 6	5 24	4	3	2	1
97.	Judges situations to determine similarities and differences. 6	5 19	4	3	2	1
98.	Makes recommendations for corrective measures based on feedback. 6	5 23	4	3	2	1
99.	Makes corrections when work needs revision 6	5 25	4	3	2	1
100.	Judges his employment on the basis of happiness in one's work. 6	5	4 17	3	2	1
101.	Demonstrates confidence in one's ability to succeed on the job 6	5 27	4	3	2	1
102.	Faces personal and social problems objectively 6	5 22	4	3	2	1

5.2 Characterization

103.	Develops desirable attitudes about personal traits, and social significance of work.	6	5 / 19 Probe #1 Response	4	3	2	1
104.	Develops resourcefulness in the work environment.	6 / 23	5	4	3	2	1
105.	Understands the concept of work and the human satisfaction found in work.	6 / 20	5	4	3	2	1
106.	Develops emotional stability and even temperament	6	5 / 19	4	3	2	1
107.	Develops the mental stability to work "under pressure" as some jobs may mean meeting a deadline	6	5 / 23	4	3	2	1
108.	Demonstrates perseverance in accomplishing a job.	6 / 24	5	4	3	2	1
109.	Demonstrates self-direction in work responsibilities.	6	5 / 24	4	3	2	1
110.	Aware of appropriate dress.	6	5	4 / 19	3	2	1
111.	Refrains from human exploitation.	6	5 / 18	4	3	2	1